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| APPLICATION NO.           | FILING DATE                       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|-----------------------------------|----------------------|---------------------|------------------|
| 10/537,782                | 01/04/2006                        | Catherine George     | 0070681-000021      | 4843             |
|                           | 7590 01/25/200<br>INGERSOLL & ROO | EXAMINER             |                     |                  |
| POST OFFICE               | BOX 1404                          | ZIMMER, MARC S       |                     |                  |
| ALEXANDRIA, VA 22313-1404 |                                   |                      | ART UNIT            | PAPER NUMBER     |
|                           |                                   |                      | 1796                |                  |
|                           |                                   |                      |                     |                  |
|                           |                                   |                      | NOTIFICATION DATE   | DELIVERY MODE    |
|                           |                                   |                      | 01/25/2008          | ELECTRONIC       |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com debra.hawkins@bipc.com

|   | Application No.  | Applicant(s)   |  |  |  |
|---|--|--|--|--|--|
|   | Application No.  | Applicant(s)   |  |  |  |
| Office Assistant Commencer  | 10/537,782   | GEORGE ET AL.  |  |  |  |
| Office Action Summary   | Examiner   | Art Unit   |  |  |  |
|   | Marc S. Zimmer   | 1796   |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply  | pears on the cover sheet with the c  | orrespondence address  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period of the provision | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timwill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |
| Status  |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 06 Ju  | <u>une 2005</u> .  |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ⊠ This  | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.   |  |  |  |  |
| 3) Since this application is in condition for allowa  | ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |  |  |  |  |  |
| Disposition of Claims   |  |  |  |  |  |
| 4)⊠ Claim(s) <u>1-15 and 18-22</u> is/are pending in the application.   |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |  |  |  |  |
| 5) Claim(s) is/are allowed.   |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1-3,5-8,12-15 and 18-22</u> is/are rejected.  |  |  |  |  |  |
| 7)⊠ Claim(s) <u>1-15 and 18-22</u> is/are objected to.  |  | · .  |  |  |  |
| 8) Claim(s) are subject to restriction and/o  | r election requirement.  |  |  |  |  |
| Application Papers  |  |  |  |  |  |
| 9) The specification is objected to by the Examine  | er.  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.  |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |  |  |  |  |  |
| 11) ☐ The oath or declaration is objected to by the Ex  | kaminer. Note the attached Office  | Action or form PTO-152.  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |  |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:  |  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.   |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |  |  |  |  |  |
| application from the International Burea  | •  |  |  |  |  |
| * See the attached detailed Office action for a list  | of the certified copies not receive  | ed.  |  |  |  |
|   |  |  |  |  |  |
| Attachment(s)   | 🗖  | (DTO 440)  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 4)   |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 06/06/05,01/25/07.   | 5) Notice of Informal P 6) Other:  |  |  |  |  |

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### Claim Objections

The Examiner objects to claims 1 and 9 and the claims dependent therefrom because they each characterize the group "R" is an alkyl/aryl group when, in fact, it is an alkylene/arylene group.

# Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The meaning and scope of the term "binary" cannot be ascertained.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5-8, 12-15, and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al., U.S. Patent # 5,696,201 in view of Haselhorst et al., U.S. Patent # 6,346,562.

King discloses a polysiloxane adhesive composition containing, in addition to the components outlined in the abstract, any one or more of the additives contemplated in

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column 5, lines 30-33 and, relevant to the present discussion, a catalyst inhibitor of which organophosphorus inhibitors are preferred (column 5, lines 11-19). The Examiner acknowledges, however, that there is no disclosure of a phosphite compound adhering to any of the structural formulae provided in the instant claims.

On the other hand, Haselhorst says of the inhibitor compounds taught previously, in particular those within the genus of organophosphorus inhibitors, that they either (i) fail to completely inhibit curing of the crosslinkable polysiloxane composition into which they are mixed, or (ii) they have a deleterious effect on the rate of curing at elevated temperatures. See column 1, lines 21-42, and especially lines 39-42. It is, therefore, an objective of that disclosure to identify a class of sterically-hindered phosphite/phosponite/phosphinate compounds that offer a combination of strong inhibition under ambient conditions but wield little or no influence over the system under crosslinking conditions. Favored permutations of the sterically-encumbered inhibitor are those where one or more of the substituents R" corresponds to a tertiary alkyl group or a triorganosilyl group. It is the Examiner's opinion that Haselhorst renders obvious the inhibitor (VI) in claim 7 given that (a) there are a finite and relatively small number of substitution patterns, e.g. 2,4- or 2,4,6-, on the phenyl ring and (b) t-butyl groups are an immediately obvious embodiment of the substituents R" where R" corresponds to CR"3 (column 4, line 39).

As for claim 7, King describes the amount of inhibitor in terms of a molar ratio of inhibitor-to-catalyst instead of as a weight ratio. Although the Examiner could draw a mathematical correlation between these, it is believed that this is not necessary as one

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of ordinary skill would undoubtedly optimize this parameter as a matter of routine experimentation keeping in mind the factors mentioned in column 5, lines 20-22 among others.

Concerning claim 8, Karstedt's catalyst is contemplated as an embodiment of the catalyst in column 4, line 24.

The reference is not forthcoming as to what adhesion promoters might be employed but the skilled artisan will select an adhesion promoter that provides both a functional group that is reactive towards one or more of the components of the composition into which it is blended and a functional group that is reactive with a chemical moiety contributed by the substrate onto which the adhesive is applied. Those having an epoxy group, an alkenyl group, an alkoxy group, a hydrosilyl group, an amino group, or a (meth)acryl group are most ubiquitous in the area of curable silicone chemistry, particularly since it is these groups that are most often exploited for preparing a crosslinked silicone polymer material.

The polydiorganosiloxane component is one having a viscosity of 100 to 80,000  $\cdot$  mm<sup>2</sup>/s (where 1 mm<sup>2</sup>/s  $\approx$  1 mPa·s) thus the limitations of claim 14 are satisfied.

As for claim 15, it is contemplated in column 5, lines 41-55 that the components may be mixed together in a diluent with heating with the proviso that the catalyst should not be present if both the base polymer and crosslinking agent are present during heating. Whereas the claim requires that the inhibitor be combined with the platinum catalyst prior to their addition to the remainder of the compounds, King advocates adding the catalyst inhibitor last. Nevertheless, the courts have held that the reversal of

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the steps of a known process is obvious. See In re Burhans, 154 F.2d 690, 69 USPQ 330 (CCPA 1946) (selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results); see also In re Gibson, 39 F.2d 975, 5 USPQ 230 (CCPA 1930) (Selection of any order of mixing ingredients is prima facie obvious.) Indeed, Haselhorst states that they prefer instead to react together the inhibitor and metal complex prior to adding them to the crosslinkable mixture.

The adhesive composition described by King is applied to any of the surfaces mentioned in column 6, lines 22-26, including fabrics. Application of heat while curing is said to be possible, but not necessary.

### Allowable Subject Matter

Claims 4 and 9-11 would be allowable if rewritten to overcome the claim objections set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. There does not appear to be any prior disclosure of the employment of organophosphorus compounds adhering to formulae (I), (III), or (V) as a hydrosilylation catalyst inhibitor.

It is observed that the ISA has characterized several references as being particularly germane to one or more claims. The Examiner has reviewed these references thoroughly and disagrees that any of them would represent a foundation for rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 571-272-1096. The examiner can normally be reached on Monday-Friday 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 18, 2007

MARC S. ZIMMER PRIMARY EXAMINER

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